TECHNICAL BASIS FOR TIER I OPERATING PERMIT

DATE: December 6, 2002

PERMIT WRITER: Stephen Coe P.E.

PERMIT COORDINATOR: Bill Rogers

SUBJECT: AIRS Facility No. 065-00008, Basic American Foods, Rexburg
Final Tier I Operating Permit

Permittee:	Basic American Foods
Permit Number:	065-00008
Air Quality Control Region:	61
AIRS Facility Classification:	A1
Standard Industrial Classification:	2034
Zone:	12
UTM Coordinates:	3620, 5415
Facility Mailing Address:	245 West 1000 North, Rexburg, ID 83444
County:	Madison
Facility Contact Name and Title:	Ron Gibb, Environmental Manager
Contact Name Phone Number:	208-359-6848
Responsible Official Name and Title:	Ed Conn, Facility Manager
Exact Plant Location:	245 West 1000 North, Rexburg, Idaho
General Nature of Business & Kinds of Products:	Potato processing

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LIST OF ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm	actual cubic feet per minute
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BAF	Basic American Foods
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
gr/dscf	grains per dry standard cubic foot
HAPs	hazardous air pollutants
hr/yr	hours per year
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
lb/yr	pounds per year
MMBtu/hr	million British thermal units per hour
mmHg	millimeters of mercury
MSDS	material safety data sheets
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
O_2	oxygen
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter of 10 micrometers or less
PW	process weight
PTC	permit to construct
scf	standard cubic feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_X	oxides of sulfur
T/yr	tons per year
U.S.C.	United States Code
UTM	Universal Transverse Mercator
VOC	volatile organic compound

PUBLIC COMMENT / AFFECTED STATES/EPA REVIEW SUMMARY

A 30-day public comment period for the Basic American Foods draft Tier I operating permit was held in accordance with IDAPA 58.01.01.364 *Rules for the Control of Air Pollution in Idaho*. The comment period ran from October 24 through November 25, 2002. A public hearing was held November 25, 2002. No comments were received by any entity.

IDAPA 58.01.01.008.01, defines *affected states* as: *"All states: whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho; or that are within fifty (50) miles of the Tier I source."*

A review of the site location information included in the permit application indicates that the facility is located within 50 miles of Montana, Wyoming, and the Fort Hall Reservation. The states of Montana and Wyoming and the Fort Hall Reservation were provided public comment packages.

A proposed permit was developed and forwarded to the EPA for their review as required by IDAPA 58.01.01.366. The EPA provided no written objection to the permit.

1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this draft Tier I operating permit in accordance with IDAPA 58.01.01.362.

The DEQ has reviewed the information provided by BAF regarding the operation of their facility located in Rexburg, Idaho. This information was submitted based on the requirements to submit a Tier I operating permit in accordance with IDAPA 58.01.01.300.

2. SUMMARY OF EVENTS

On December 13, 1995, DEQ received the Tier I operating permit application from BAF for their Rexburg facility. Supplemental information, prepared by Kennedy/Jenks Consulting on behalf of BAF, was received on February 12, 1996. A public comment period on the draft Tier I operating permit was provided from October 24 though November 25, 2002. A public hearing was held November 25, 2002. No comments were received. A proposed permit was developed and forwarded to the EPA. The EPA provided no written objection to the permit.

3. BASIS OF THE ANALYSIS

The following documents were relied upon in preparing this memorandum and the Tier I operating permit:

- PTC No. 065-00008, issued July 30, 1980
- Tier I operating permit application, received December 13, 1995
- supplemental application materials received on February 12, 1996
- Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, January 1995, Office of Air Quality Planning and Standards, EPA
- guidance developed by the EPA and DEQ
- Title V permits issued by other jurisdictions.

4. FACILITY DESCRIPTION

4.1 GENERAL PROCESS DESCRIPTION

BAF's Rexburg facility produces a variety of dehydrated potatoes.

4.2 FACILITY CLASSIFICATION

The facility is classified as a major facility, in accordance with IDAPA 58.01.01.008.10, for Tier I permitting purposes because the facility emits or has the potential to emit a regulated air pollutant in amounts greater than or equal to 100 T/yr. The facility is not a designated facility as defined by IDAPA 58.01.01.006.27. The facility is currently a major PSD facility because it emits or has the potential to emit CO in amounts greater than or equal to 250 T/yr. The facility is subject to federal NSPS requirements in accordance with 40 CFR 60, Subpart Dc, but it is not subject to state and federal NESHAP or MACT regulations. The SIC defining the facility is 2034, and the AIRS facility classification is A.

At the time of permit application submittal, the facility has the potential to emit the following pollutants:

- CO 302.0 T/yr
- NO_x 130.8 T/yr
- PM_{10} 155.7 T/yr
- SO_x 212.1 T/yr

4.3 AREA CLASSIFICATION

The facility is located in Madison County, which is located within AQCR 61. This area is unclassifiable for all federal and state criteria pollutants. There are no Class I areas within 10 km of the facility.

4.4 PERMITTING HISTORY

Permit to Construct No. 065-00008, July 30, 1980.

4.5 EMISSIONS DESCRIPTION

The permittee has submitted the following maximum emissions:

Table 4.1 Facility PTE

CO	NO_x	SO_x	PM_{10}	VOC
302 T/yr	131 T/yr	211.1 T/yr	156 T/yr	30.4 T/yr

The permittee determined the above emissions using facility-operating scenarios included in its Tier I operating permit application. The emission listed above are based on maximum facility utilization and burning only wood waste in the Kipper boiler. As allowed by PTC 065-00008, BAF is able to burn up to 39% coal by weight and 61% wood waste in the Kipper boiler.

The Kipper boiler contributes the following emissions:

Table 4.2 Kipper Boiler PTE

CO	NO_x	SO_x	PM_{10}	VOC
238.3 T/yr	85.3 T/yr	197.1T/yr	54.7 T/yr	12.6 T/yr

Actual emissions for CO, the pollutant emitted in the greatest quantity, is less than PSD major source thresholds as shown in the Appendix.

5. *REGULATORY ANALYSIS*

5.1 FACILITY-WIDE APPLICABLE REQUIREMENTS

5.1.1 Fugitive Particulate Matter - IDAPA 58.01.01.650-651

5.1.1.1 Requirement

Permit Condition 2.1 states that all reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

5.1.1.2 Compliance Demonstration

Permit Condition 2.2 states that the permittee is required to monitor and maintain records of the frequency and the methods used by the facility to reasonably control fugitive particulate emissions. IDAPA 58.01.01.651 gives some examples of ways to reasonably control fugitive emissions (e.g., using water or chemicals, applying dust suppressants, using control equipment, covering trucks, paving roads or parking areas, and removing materials from streets).

Permit Condition 2.3 requires that the permittee maintain a record of all fugitive dust complaints received. In addition, the permittee is required to take appropriate corrective action as expeditiously as practicable after a valid complaint is received. The permittee is also required to maintain records that include:

- the date that each complaint was received,
- a description of the complaint,
- the permittee's assessment of the validity of the complaint,
- any corrective action taken, and
- the date the corrective action was taken.

To ensure that the methods being used by the permittee to reasonably control fugitive PM emissions whether or not a complaint is received, Permit Condition 2.4 requires that the permittee conduct periodic inspections of the facility. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emissions inspection.

Both Permit Conditions 2.3 and 2.4 require the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.2 Control of Odors - IDAPA 58.01.01.775-776

5.1.2.1 Requirement

Permit Condition 2.5 and IDAPA 58.01.01.776 both state: "*No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution.*" This condition is currently considered federally enforceable until such time it is removed from the SIP, at which time it will be a state-only enforceable requirement.

5.1.2.2 Compliance Demonstration

Permit Condition 2.6 requires the permittee to maintain records of all odor complaints received. If the complaint has merit, the permittee is required to take appropriate corrective action as expeditiously as practicable. The records are required to contain the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Permit Condition 2.6 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of receiving a valid odor complaint meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.3 Visible Emissions - IDAPA 58.01.01.625

5.1.3.1 Requirement

IDAPA 58.01.01.625 and Permit Condition 2.7 state: "*No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined....*" This provision does not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emissions to comply with the requirements of this rule.

5.1.3.2 Compliance Demonstration

To ensure reasonable compliance with the visible emissions rule, Permit Condition 2.8 requires that the permittee conduct routine visible emissions inspections of the facility. The permittee is required to inspect potential sources of visible emissions during daylight hours and under normal operating conditions. The visible emissions inspection consists of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emissions covered by this section, the permittee must either:

- take appropriate corrective action as expeditiously as practicable, or
- perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625.

A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is determined to be greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee must take corrective action. The facility must also report the exceedance in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection and each opacity test when conducted. These records must include:

- the date of each inspection,
- a description of the permittee's assessment of the conditions existing at the time visible emissions are present,
- any corrective action taken in response to the visible emissions, and
- the date corrective action was taken.

It should be noted that if a specific emissions unit has a specific compliance demonstration method for visible emissions that differs from Permit Condition 2.8, then the specific compliance demonstration method overrides the requirement of Permit Condition 2.8. Permit Condition 2.8 is intended for small sources that would generally not have any visible emissions.

Permit Condition 2.8 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.4 Startup, Shutdown, Scheduled Maintenance, Safety Measures, Upset and Breakdown- IDAPA58.01.01.130-136

5.1.4.1 Requirement

Permit Condition 2.9 requires that the permittee comply with the requirements of IDAPA 58.01.01.130-136 for startup, shutdown, scheduled maintenance, safety measures, upset, and breakdowns. This section is fairly self-explanatory and no additional detail is necessary in this technical analysis. It should; however, be noted that subsections 133.02, 133.03, 134.04, and 134.05 are not specifically included in the permit as applicable requirements. These provisions of the *Rules* only apply if the permittee anticipates requesting consideration under subsection 131.02 of the *Rules* to allow DEQ to determine if an enforcement action to impose penalties is warranted. Section 131.01 states "*...The owner or operator of a facility or emissions unit generating excess emissions shall comply with Sections 131, 132, 133.01, 134.01, 134.02, 134.03, 135, and 136, as applicable. If the owner or operator anticipates requesting consideration under Subsection 131.02, then the owner or operator shall also comply with the applicable provisions of Subsections 133.02, 133.03, 134.04, and 134.05.*" Failure to prepare or file procedures pursuant to Sections 133.02 and 134.04 is not a violation of the *Rules* in and of itself, as stated in subsections 133.03.a and 134.06.b. Therefore, since the permittee has the option to follow the procedures in Subsections 133.02, 133.03, 134.04, and 134.05; and is not compelled to, the subsections are not considered applicable requirements for the purpose of this permit and are not included as such.

5.1.4.2 Compliance Demonstration

The compliance demonstration is contained within the text of Permit Condition 2.9. No further clarification is necessary here.

5.1.5 Open Burning

IDAPA 58.01.01.600-616 present the rules governing the control of open burning. Permit Permit Condition 2.12 incorporates these requirements. BAF Rexburg has not identified any circumstances for open burning. This permitting action does not include any review and incorporation of excess emissions plans in the permit.

5.1.6 Renovation/Demolition

The permittee shall comply with all applicable portions of 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

[40 CFR 61 Subpart M]

5.1.7 Regulated Substances for Accidental Release Prevention Provisions

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:

- Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130; or
- The date on which a regulated substance is first present above a threshold quantity in a process.

[40 CFR 68.10 (a)]

5.1.8 Recycling and Emissions Reductions

The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82 Subpart F]

5.1.9 Fuel-Burning Equipment

The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

5.1.9.1 Monitoring & Recordkeeping Requirements

Emissions unit groups are addressed in specific sections. Permit Condition 2.11 addresses small emissions units not specifically addressed in the specific sections of the permit.

5.1.10 NSPS

Not applicable. The installation of the economizer in 2001 did not trigger NSPS, because the emissions were reduced, through this waste heat recovery.

5.1.11 Compliance Testing

If testing is required, the permittee shall provide notice of intent to test to the Department at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by Department approval. The Department may, at its option, have an observer present at any emissions tests conducted on a source. The Department requests that such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior Department approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by the Department for any testing deviations, the Department may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any compliance test, the permittee is strongly encouraged to submit in writing to the Department, at least 30 days in advance, the following for approval:

- The type of test method to be used;
- Any extenuating or unusual circumstances regarding the proposed test; and
- The proposed schedule for conducting and reporting the test.

Within 30 days following the date in which a compliance test required by this permit is concluded, the permittee shall submit to the Department a compliance test report for the respective test. The compliance test report shall include all process operating data collected during the test period as well as the test results, raw test data, and associated documentation, including any approved test protocol.

5.1.12 Test Methods

If testing is required, the permittee shall use the test methods described in Table 2.2 of Permit Condition 2.15 to measure the pollutant emissions.

5.1.13 Reports and Certifications

All periodic reports and certifications required by Permit Condition 2.10, shall be submitted to the Department within 30 days of the end of each specified reporting period. Excess emissions reports and notifications shall be submitted in accordance with IDAPA 58.01.01.130-136.

5.1.14 Monitoring and Recordkeeping

The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Recording of monitoring information shall include, but not be limited to: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available to Department representatives upon request in either hard copy or electronic format.

[IDAPA 58.01.01.322.07, 5/1/94]

5.2 EMISSIONS UNIT SPECIFIC REQUIREMENTS

5.2.1 Kipper Boiler

The Kipper boiler has the ability with PTC 065-00008 to burn up to 39% coal in the kipper boiler. These emissions have not accounted for the burning of coal at the facility. In the event that BAF should choose to burn coal in the boiler a new emission estimate needs to be submitted to the Department prior to the fuel change. The current emission estimates are based on burning wood waste only.

5.2.1.1 Emissions Unit Description

The Kipper Boiler provides process steam. It is a wood-fired boiler manufactured by Kipper and Sons, Inc. with a rated capacity of 60,000 pounds of steam per hour. The boiler is permitted to operate up to 8,568 hr/yr at its 60,000 lbs/hr rated steam capacity. Emissions controls on the Kipper Boiler include a Zurn mechanical dust collector and a Riley Ventri-Rod Scrubber.

5.2.1.2 Permit Limits

Table 5.1 Permit Limits

Parameter	Permit Limit	Applicable Requirements Reference
PM	0.08 gr/dscf at 8% O_2	IDAPA 58.01.01.676, PTC No. 039-00001

The visible emissions requirement of Permit Condition 2.7 is a Permit condition that applies to this emissions unit. Specifically, Permit Condition 2.7 has been referenced in Permit Condition 3.5 prevents emissions from the boiler from exceeding 20% opacity, as specified by IDAPA 58.01.01.625 (4/5/00). As submitted in the permittee's December 11, 1995 application, the permitted operating scenario given was for 8,568 hours per year. A review of compliance with the grain-loading standard for wood waste combustion has been performed and data has demonstrated compliance to the grain-loading standard. This determination is based on wood waste combustion data, as well as data submitted in the application materials.

5.2.1.3 Monitoring, Recordkeeping & Reporting Requirements

Opacity monitoring, recordkeeping, and reporting requirements for this emissions unit are handled per the requirements given in Permit Condition 2.8, and referenced by Permit Condition 3.11.

Permit Condition 3.6 requires the permittee to submit monitoring data for the particulate emissions control devices for the Kipper Boiler, as required by 40 CFR Part 64 – Compliance Assurance Monitoring. Compliance Assurance Monitoring is required for the Kipper Boiler per 40 CFR 64.2 because the Kipper Boiler:

- Is subject to an emission limit for particulates.
- Uses a control device to comply with the emission limitation.
- Has uncontrolled potential particulate emissions that exceed 100 tons per year, which is the amount of particulate emissions needed for a source in the Rexburg area to be classed as a major source under 40 CFR Part 70.

Because the controlled potential emissions of particulates from the Kipper Boiler is less than 100 tons per year, the Kipper Boiler is not a *"Large pollutant-specific emissions unit"* as identified in 40 CFR 64.5(a); hence the deadline for submittal of Compliance Assurance Monitoring data is the next application for renewal of the Tier I permit (as established in 40 CFR 64.5(b). This provision is implemented by Permit Condition 3.6, which requires the permittee to submit the needed monitoring data with the next permit renewal.

5.2.2 Boilers 1 & 2

Boilers 1 & 2 are natural gas-fired, and provide steam for the facility. Boiler 1 is an Erie City unit, with a rated steam output of 40,000 lbs/hr and a maximum estimated heat input of 52 MMBtu/hr. Boiler 2 is an Erie City unit, with a rated steam output of 26,500 lbs/hr and a maximum estimated heat input of 35 MMBtu/hr. Both boilers were installed prior to 1965, and are not subject to NSPS.

5.2.2.1 Permit Limits

Boilers 1 & 2 are both subject to IDAPA 58.01.01.675 (5/1/94). The visible emissions requirement under Permit Condition 2.7 is a Permit condition that applies to both boilers, and has been referenced in Permit

Condition 4.4. Both boilers are limited to burning natural gas, which serves as a surrogate permit limit to the opacity standard given in Permit Conditions 4.4 and 2.7.

5.2.2.2 Monitoring, Recordkeeping & Reporting Requirements

No monitoring, recordkeeping, and reporting requirements for Boilers 1 & 2 have been included in the permit pertaining to the grain-loading requirements under IDAPA 58.01.01.675. Compliance with Permit Conditions 4.2 and 4.3 shall be deemed as compliance with Permit Condition 4.1. Proper combustion of natural gas assures compliance with IDAPA 58.01.01.675 (5/1/94). The Permit condition pertaining to visible emissions compliance determinations referenced by Permit Condition 2.8 have been included in Permit Condition 4.5 as a compliance demonstration procedure. The data required by Permit Condition 4.5 shall be reported in accordance with Permit Conditions 4.6 and 4.7.

5.2.3 Process A

Process A produces dehydrated potato products. The raw material input to the process is cooked potatoes. Process A can operate up to 8,760 hrs/yr. Drying heat is provided by both natural gas combustion and steam produced by the plant boilers.

5.2.3.1 Permit Limits

Table 5.2 Permit Emissions Limits

Specific Emissions Unit(s)	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference
7020, 7101, 7102, 7019	PM	Process weight rate	IDAPA 58.01.01.702 (4/5/00)
7020, 7101, 7102, 7019	Visible Emissions	20%	IDAPA 58.01.01.625 (4/5/00)

Visible emissions is a Permit condition that applies to Process P1 Stacks 7101, 7102, 7019, and 7020. The visible emissions requirement has been referenced in Permit Condition 5.4. Process A was installed prior to 1965; therefore, is subject to IDAPA 58.01.01.702 (4/5/00).

5.2.3.2 Monitoring, Recordkeeping & Reporting Requirements

Process A is subject to the process weight rate requirements of IDAPA 58.01.01.702, as specified in Permit Condition 5.1. The permittee has provided emissions estimates that demonstrate compliance with process weight at the given throughput limits (see Appendix A). No reporting and recordkeeping requirements have been incorporated into the permit conditions because all estimated maximum emissions are considerably lower than the allowable emissions under IDAPA 58.01.01.702 (see Appendix A). Compliance with the visible emissions requirement of Permit Conditions 5.3 2.7 is demonstrated through the procedures.

5.2.4 Process B

5.2.4.1 Emissions Unit Description

Process B produces dehydrated potato products. The raw material input to the process includes cooked potatoes, and food additives. Process B can operate up to 8760 hours per year. Process B heat is provided by plant boilers.

5.2.4.2 Permit Limits

Permit Condition 6.1 and IDAPA 58.01.01.701 (4/5/00) state: *"A person shall not discharge into the atmosphere from any source operating on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations..."*. A portion of Process B was installed or modified in 1999; therefore, it is subject to this provision. Visible emissions are a permit requirement, given under Permit Condition 2.7, that applies to Process B stacks. Reference to this requirement has been provided in Permit Condition 6.2.

5.2.4.3 Monitoring, Recordkeeping & Reporting Requirements

Monitoring and recordkeeping requirements are contained in Permit Condition 6.3. Reporting requirements are contained in Permit Condition 6.4.

The permittee has provided emissions estimates that demonstrate compliance with process weight at the given throughput limits (see Appendix A). No reporting and recordkeeping requirements have been incorporated into the permit conditions because all estimated maximum emissions are considerably lower than the allowable emissions under IDAPA 58.01.01.701 (see Appendix A). Compliance with the visible emissions requirement of Permit Conditions 6.3 2.7 is demonstrated through the procedures.

Compliance with the visible emissions requirement of Permit Conditions 6.2 and 2.7 is demonstrated through the procedures specified in Permit Condition 2.8, which is referenced in Permit Condition 6.3. Permit Condition 6.4 pertains to a responsible official certifying the applicable data.

6. *INSIGNIFICANT ACTIVITIES*

Listed below are the insignificant activities described by the source in accordance with IDAPA 58.01.01.317.

Table 6.1 Insignificant Activities

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(I) Citation
Operation, loading, and unloading of storage tanks and storage vessels, with lids or other appropriate closures and less than 260-gallon capacity, heated only to the minimum extent necessary to avoid solidification.	IDAPA 58.01.01.317.01.B(1)
Operation, loading and unloading of storage tanks not greater than 1,100-gallon capacity with lids, not containing hazardous air pollutants and with maximum vapor pressure of 550 mmHg.	IDAPA 58.01.01.317.01.B(2)
Operation, loading and unloading of volatile organic compound storage tanks, 10,000-gallon capacity or less, with lids or other appropriate closure and vapor pressure not greater than 80 mmHg at 21°C.	IDAPA 58.01.01.317.01.B(3)
Operation, loading, unloading, and storage of butane, propane, or liquefied petroleum gas (LPG) in storage tanks or vessels less then 40,000-gallon capacity.	IDAPA 58.01.01.317.01.B(4)
Combustion sources, less than 5 MMBtu/hr, exclusively using natural gas, butane, propane, and/or LPG.	IDAPA 58.01.01.317.01.B(5)
Combustion source, not greater than 0.5 MMBtu/hr, if burning waste wood, wood waste, or waste paper.	IDAPA 58.01.01.317.01.B(8)
Welding using not more than 1 T/day of welding rod.	IDAPA 58.01.01.317.01.B(9)
"Parylene" coaters using less than 500 gallons of coating per year.	IDAPA 58.01.01.317.01.B(11)
Printing and silk-screening, using less than 2 gal/day of a combination of inks, coatings, adhesives, fountain solutions, thinners, retarders, or nonaqueous cleaning solutions.	IDAPA 58.01.01.317.01.B(12)
Water cooling towers, not using chromium-based corrosion inhibitors, not using barometric jets or condensers, not greater than 10,000 gal/min, and not in direct contact with gaseous or liquid process streams containing regulated air pollutants.	IDAPA 58.01.01.317.01.B(13)
Industrial water chlorination, less than 20 million gal/day capacity.	IDAPA 58.01.01.317.01.B(16)
Surface coating, using less than 2 gal/day.	IDAPA 58.01.01.317.01.B(17)
Space heaters and hot water heaters using natural gas, propane or kerosene and generating less than 5 MMBtu/hr.	IDAPA 58.01.01.317.01.B(5)

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(I) Citation
Tanks, vessels, and pumping equipment, with lids or other appropriate closure, for storage or dispensing of aqueous solutions of inorganic salts, bases and acids, excluding solutions with: 99% or greater sulfuric or phosphoric acid; 77% or greater nitric acid; 30% or greater hydrochloric acid; or more than one liquid phase where the top phase is more than 1% VOC.	IDAPA 58.01.01.317.01.B(19)
Equipment, with lids or other appropriate closure, used exclusively to pump, load, unload, or store high-boiling-point organic material, with initial boiling point not less than 150°C or vapor pressure not more than 5 mmHg at 21°C.	IDAPA 58.01.01.317.01.B(20)
Milling and grinding activities (paste forms, if used, are less than 1% volatile organic compounds).	IDAPA 58.01.01.317.01.B(22)
Rolling, forging, drawing, stamping, shearing, and spinning metals.	IDAPA 58.01.01.317.01.B(23)
Dip-coating operations using materials with less than 1% VOC.	IDAPA 58.01.01.317.01.B(24)
Surface coating, aqueous solution or suspension containing less than 1% VOC.	IDAPA 58.01.01.317.01.B(25)
Cleaning and stripping activities and equipment, using solutions having less than 1% volatile organic compounds by weight (no acid cleaning or stripping on metal substrates).	IDAPA 58.01.01.317.01.B(26)
Storage and handling of water based lubricants for metal working with organic content less than 10%.	IDAPA 58.01.01.317.01.B(27)
Process A, stack id. 7006	IDAPA 58.01.01.317.01.b.i.(30)
Process A, stack id. 7001	IDAPA 58.01.01.317.01.b.i.(30)
Process A, stack id. 7027	IDAPA 58.01.01.317.01.b.i.(30)
Process B, stack id. 5034	IDAPA 58.01.01.317.01.b.i.(30)
Process B, stack id. 707	IDAPA 58.01.01.317.01.b.i.(30)
Process B, stack id. 734	IDAPA 58.01.01.317.01.b.i.(30)
Process B, stack id. 729	IDAPA 58.01.01.317.01.b.i.(30)

7. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios have been submitted by the permittee.

8. TRADING SCENARIOS

No trading scenarios have been submitted by the permittee.

9. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION

9.1 COMPLIANCE PLAN

Pursuant to the information submitted by the Basic American Foods Rexburg facility in the June 2001 Tier I operating permit, the facility has not obtained PTCs for construction and/or modification of all emission sources at the facility in accordance with IDAPA 58.01.01.200 through 223. The Department and BAF have identified that portions of Process B are not in compliance because permits to construct were not obtained prior to construction or modification. A Tier II operating permit application will be submitted and a Tier II operating permit issued to resolve the noncompliance issues.

In addition, the permittee has the continuing responsibility to submit any supplementary information needed, including information for any other sources, in accordance with IDAPA 58.01.01.315.

Because these sources have been constructed and/or modified without a permit, the Department has determined that the most appropriate course of action to bring the facility into compliance with the requirements is to issue a single facility-wide permit that:

(a) Specifically establishes the operating terms and conditions required by the PTC rules for sources for which a permit was required but not obtained.

(b) Collectively addresses the operating terms and conditions required to demonstrate that emissions from all sources at the facility will not contribute to the violation of an applicable standard.

(c) Establish federally enforceable limits, which will limit the facility's potential to emit to levels that are below the PSD threshold values for all pollutants. The permittee has not triggered PSD as of the issuance of this permit.

The Department is, therefore, requiring a combined Tier II operating permit (Tier II) and PTC (hereafter referred to as the facility-wide permit). The Tier II for Basic American Foods Rexburg facility is required in accordance with IDAPA 58.01.01.401.03 based on the determination that specific emission standards, or requirements on operation or maintenance are necessary to ensure compliance with any applicable emission standard or rule. The facility-wide permit will contain the terms and conditions necessary for the facility to comply with the applicable requirements of IDAPA 58.01.01.400 through 410.

The facility-wide permit will also include all of the terms and conditions for new or modified sources. For those sources within the facility that have existing PTCs, the terms and conditions will be incorporated into the new permit. For sources at the facility for which a PTC was required but not obtained, the permit will establish new emission limits, controls, and other requirements in accordance with the applicable portions of IDAPA 58.01.01.200 through 223. The new facility-wide permit will address all applicable emission standards, required emission control technology, and demonstrate that the facility will not cause or contribute to any ambient air quality standard or applicable prevention of significant deterioration (PSD) increment.

The combined Tier II and PTC is different than, and separate from, the Tier I in that the new permit will establish new applicable emission limits, controls, and other requirements that are as stringent as the requirements contained in or enforceable under the state implementation plan. This permit will create new underlying requirements for sources that are in existence at the time the initial Tier I is issued. A Tier I permit modification will, therefore, need to be issued concurrently with the issuance of the new facility-wide permit.

The applicable requirements established in the facility-wide permit pursuant to IDAPA 58.01.01.200 through 223 shall be clearly identified as such in the permit and shall remain in full force and effect until such time as they are modified or terminated in accordance with the procedures for issuing a PTC.

The specific compliance schedule elements and milestones to achieve compliance are described below.

Permit Condition 9.2. The permittee will be required to submit a complete permit application with all supporting information and documentation for issuance of a facility-wide permit in accordance with IDAPA 58.01.01.400 through 410 no later than 180 days from the final issuance date of the Tier I. A facility-wide permit is required by the Department to establish the terms and conditions necessary to comply with an applicable rule or standard. The Department shall consider the emissions from all sources at the facility and the specific requirements for individual sources in preparing the facility-wide operating permit.

The permit application shall clearly identify all emissions units at the facility, listing currently permitted emissions units, exempted units for which the facility maintains exemption documentation, units constructed before and not modified since January 24, 1969, and units constructed and/or modified since January 24, 1969 without a permit or construction approval from the Department. Application information shall provide

facility information and emissions data for all emissions units in accordance with IDAPA 58.01.01.402 and 403 and shall include a demonstration that the sources at the facility will not cause or significantly contribute to a violation of the NAAQS or of any applicable PSD increment.

The application submittal deadlines have been set to reasonably accommodate updating and organizing the emissions unit descriptions and emissions data, and conducting ambient air quality modeling for all sources. Applications that are deemed or remain incomplete beyond the 180-day milestone shall constitute a violation of this permit condition.

Permit Condition 9.3. In addition to the information submitted under Permit Condition 9.2, the permittee is required to submit all of the information necessary to address the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through 223 and the NSPS requirements in 40 CFR 60, Subpart KB for the construction and/or modification of sources for which the permittee was required but did not obtain a PTC. The information must include all information to address the additional permit requirements for new major facilities or major modifications where construction without enforceable limits may have triggered PSD or nonattainment NSR requirements.

This data must be submitted with the complete permit application required under Permit Condition 9.2 in order to issue a single combined permit. The information is, therefore, due no later than 180 days from the final issuance date of the Tier I. Failure to include complete information for addressing the PTC requirements within the required timeframe shall constitute a violation of this permit condition.

Permit Condition 9.4. If, through the development of the facility-wide permit, any other source or sources are identified that should have obtained a PTC or PTC modification and for which the applicant did not include the information under Permit Condition 9.3, a supplemental application that contains all of the information necessary to address the applicable requirements for PTCs in accordance with IDAPA 58.01.01.200 through 223 shall be submitted no later than 30 days after receiving written notification from the Department. Supplemental applications that are deemed or remain incomplete beyond the 30-day milestone shall constitute a violation of this permit condition.

Permit Condition 9.5. If the permittee can clearly demonstrate that the data required for the facility-wide permit cannot be collected and organized within the specified timeframe, the permit application submittal deadlines may be extended at the discretion of the Department for a specific time period not to exceed one year. For the Department to consider a request for an extension without jeopardizing the terms and conditions of the permit, the request must be submitted by the facility no later than the midpoint of the compliance milestone timeline. The request must be submitted in writing with a clear demonstration why the data cannot reasonably be submitted within the specified timeframe. An example of information that might justify an extension is the absence of ambient monitoring data required to complete a PSD application.

The Department will review the request and the justification and approve or disapprove the extension in writing. The responsibility for meeting the schedule if the Department has not issued a written extension belongs to the permittee.

Permit Condition 9.6. The Department intends to draft and issue a single facility-wide permit to bring the permittee back into compliance. This permit will fully meet all of the applicable requirements in the *Rules* and the federally approved state implementation plan. Because the permit will contain both elements of PTCs and of Tier II permits, it will clearly identify the origin and basis for each term and condition. The terms and conditions established pursuant to the PTC requirements shall be clearly marked and shall not expire with any Tier II operating permit term. The terms and conditions established pursuant to the Tier II requirements shall be clearly marked and shall be implemented in accordance with the Tier II process. The procedures for issuing a PTC in IDAPA 58.01.01.209 shall be followed concurrently with the procedures for issuing a Tier II in IDAPA 58.01.01.404. The permit shall clearly state that any future modification of a term or condition in the permit shall be subject to the appropriate procedural requirements on which the original term or condition was based.

Permit Condition 9.7. Within 30 days after the Department determines the facility-wide permit application complete, the permittee will need to request a significant permit modification to the Tier I in accordance with IDAPA 58.01.01.382.02. A significant Tier I modification will require the payment of fees in accordance with

IDAPA 58.01.01.389.06.b.iii. Because the information in a complete application as required under Permit Condition 9.2 and 9.3 should contain all of the technical information necessary to modify the Tier I, the Department may waive portions of the standard application requirements as appropriate provided the permittee certifies the completeness, truth, and accuracy of all documents submitted.

The Tier I modification shall be processed concurrently with the facility-wide permit in accordance with the procedures for issuing a Tier I in IDAPA 58.01.01.360 through 369.

Permit Condition 9.8. The permittee shall be required to submit a progress report at the end of each calendar quarter (January 1, April 1, July 1, and October 1) of each year stating when each of the conditions of each milestone were or will be achieved. A detailed explanation is required when milestones were not or will not be achieved in accordance with the schedule.

Permit Condition 9.9. The incorporation of the compliance schedule into the Tier I operating permit does not sanction noncompliance with the applicable rules.

10. ACID RAIN PERMIT

Basic American Foods' Rexburg facility is not subject to the acid rain permitting requirements of 40 CFR 72 - 75. The facility is not an affected unit according to the definitions and applicability under 72.2 and 72.6. The BAF Rexburg facility is a non-utility unit (72.6(b)(8)). "Unit" is defined as a fossil fuel-burning device and "utility" is defined as any facility that sells electricity.

11. AIRS DATABASE

AIRS/AFS FACILITY-WIDE CLASSIFICATION DATA ENTRY FORM

AIR PROGRAM / POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
SO_2	B						U
NO_X	B						U
CO	A	✓				A	U
PM_{10}	C						U
PT (Particulate)	A						U
VOC	B						U
THAP (Total HAPs)	B						
			APPLICABLE SUBPART				

AIRS/AFS CLASSIFICATION CODES:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant, which is below the 10 T/yr threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.

SM = Potential emissions fall below applicable major source thresholds **if and only if** the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

12. REGISTRATION FEES

This facility is a major facility as defined by IDAPA 58.01.01.008.10; therefore, registration and registration fees, in accordance with IDAPA 58.01.01.387, apply.

13. RECOMMENDATION

Based on the Tier I application and review of the federal regulations and state rules, staff recommends that DEQ issue final Tier I operating permit No. 065-00008 to BAF for their Rexburg facility.

KK/SEC:sm Project No. T1-9512-145-1

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cc: Jorge Garcia, Idaho Falls Regional Office
Sherry Davis, AQ Program office
Laurie Kral, EPA Region 10

APPENDIX A

Rexburg Emission Inventory

Process Identification	Stack Identification	Estimated Annual Emissions, tons						
		CO	NOX	SO2	TSP	PM-10	VOC	Lead
Boilers	Kipper Boiler	238.3	85.3	3.6	54.7	53.7	12.6	0.0167
Boilers	Fugitive	-	-	-	39.9	10.0	14.9	-
Boilers	Boiler 1	18.8	22.3	0.13	1.7	1.7	1.2	0.0011
Boilers	Boiler 2	12.6	15.0	0.09	1.1	1.1	0.8	0.0008
A	7020, 7101, 7102, 7019	22.3	4.3	1.9	50.5	36.9	0.5	0.0
B	5037, 4000, 228, 234, 311/312, 410, 411, 613/614, 615/616, 755, and 572	10.0	3.8	12.9	69.0	52.4	0.4	0.0
	Totals:	**302.0**	**130.8**	**18.6**	**217.0**	**155.7**	**30.4**	**0.0187**

Rexburg Process Weight Calculations

IDEQ Process ID	Hourly Process Weight Rate, 000 lbs/hr	Emissions (lb/hr)	Allowable Emissions, IDAPA 58.01.01.702 (lb/hr)	Allowable Emissions, IDAPA 58.01.01.701 (lb/hr)
Process A	24.30	11.50	17.11	
Process B	175.40	12.63		22.51

Rexburg Historical CO

Emissions Analysis

Kipper CO equations:

Pounds of Steam = (therms) X (100,000 BTU/therm) X (0.67% eff.) / (1,000 BTU/lb of steam)
Tons of CO = (lbs of steam) X (55.62 lbs CO)/(60,000 lbs of steam) / 2000 lbs/ton

Other CO equations:

Scf of Nat Gas = (therms) X (100,000 BTU/therm) / (1020 BTU/Scf of Nat Gas)
Tons of CO = (Scf of Nat Gas) X (267 lbs of CO)/(1,000,000 Scf of Nat Gas) / (2000 lbs/ton)

		Wood Therms	Gas Therms	Total Therms	CO Emissions (tons) Kipper	Other	Total	Rolling 12 Mo. Sum
1999	September	225,535	85,295	310,830	7.0	1.12	8.12	
1999	October	598,036	282,915	880,951	18.6	3.70	22.27	
1999	November	433,026	279,044	712,070	13.4	3.65	17.10	
1999	December	391,506	339,625	731,131	12.2	4.45	16.60	
1999	January	370,697	388,301	758,998	11.5	5.08	16.59	
2000	February	418,504	296,494	714,998	13.0	3.88	16.88	
2000	March	518,774	303,299	822,073	16.1	3.97	20.08	
2000	April	474,966	285,118	760,084	14.7	3.73	18.48	
2000	May	527,090	276,675	803,765	16.4	3.62	19.99	
2000	June	390,410	279,578	669,988	12.1	3.66	15.78	
2000	July	457,373	231,035	688,408	14.2	3.02	17.23	
2000	August	671,846	183,696	855,542	20.9	2.40	23.27	212.4
2000	September	433,087	96,843	529,930	13.4	1.27	14.72	219.0
2000	October	677,911	307,265	985,176	21.1	4.02	25.07	221.8
2000	November	511,964	332,394	844,358	15.9	4.35	20.25	224.9
2000	December	388,523	394,380	782,903	12.1	5.16	17.23	225.6
2000	January	94,272	414,105	508,377	2.9	5.42	8.35	217.3
2001	February	406,656	385,450	792,106	12.6	5.04	17.67	218.1
2001	March	399,505	368,765	768,270	12.4	4.83	17.23	215.3

2001	April	666,080	334,315	1,000,395	20.7	4.38	25.06	221.8
2001	May	379,430	337,360	716,790	11.8	4.42	16.20	218.1
2001	June	649,561	272,860	922,421	20.2	3.57	23.74	226.0
2001	July	534,121	179,214	713,335	16.6	2.35	18.93	227.7
2001	August	229,433	79,553	308,986	7.1	1.04	8.17	212.6
2001	September	110,456	52,120	162,576	3.6	0.68	4.27	202.2
2001	October	472,975	256,870	729,845	15.3	3.36	18.71	195.8
2001	November	461,684	214,716	676,400	15.0	2.81	17.79	193.3
2001	December	409,583	263,397	672,980	13.3	3.45	16.74	192.9
2001	January	227,100	288,590	515,690	7.4	3.78	11.15	195.7
2002	February	442,800	245,764	688,564	14.4	3.22	17.58	195.6
2002	March	721,339	238,647	959,986	23.4	3.12	26.53	204.9
2002	April	528,364	101,144	629,508	17.1	1.32	18.47	198.3
2002	May	439,045	161,301	600,346	14.2	2.11	16.36	198.4
2002	June	596,010	108,310	704,320	19.3	1.42	20.76	195.4
2002	July	123,945	68,387	192,332	4.0	0.90	4.92	181.4
2002	August	199,345	157,527	356,872	6.5	2.06	8.53	181.8
2002	September			-				
2002	October			-				
2002	November			-				
2002	December			-				
2002							Max 12-month Total	227.7